

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Cancelled).

Claim 14 (Currently Amended): A high-frequency amplifying device for amplifying a high-frequency signal with a plurality of stages of amplifying elements, comprising:

a high-frequency amplifying unit ~~having~~ including a plurality of ~~[[the]]~~ amplifying elements ~~for amplifying the~~ configured to amplify an input high-frequency signal;

a measuring circuit ~~for measuring the~~ configured to measure an amplitude of the input high-frequency signal; and

a plurality of bias control circuits ~~[[for]]~~ configured to respectively independently ~~controlling and~~ continuously control biases applied to ~~[[the]]~~ respective amplifying elements according to ~~[[the]]~~ a value of amplitude measured by said measuring circuit, wherein

the plurality of bias control circuits includes at least a first bias control unit and a second bias control unit, the first bias control unit including a current subtracting unit configured to output a difference current corresponding to a difference between a first input current and a first predetermined current, and the second bias control unit including a current adding unit configured to output a sum current corresponding to a sum of a second input current and a second predetermined current.

Claims 15-16 (Cancelled).

Claim 17 (Currently Amended): The high-frequency amplifying device according to claim 14, wherein each of said plurality of bias control circuit circuits of a predetermined number of first stages on ~~[[the]]~~ a front side, ~~each of said plurality of bias control circuits has~~

includes a current subtracting circuit ~~for inputting~~ configured to input thereto a supplied current having a first value corresponding to the amplitude ~~measured by said measuring circuit~~, and a first bias applying circuit ~~for supplying~~ configured to apply the supplied current to the current subtracting circuit and ~~applying~~ a bias corresponding to ~~[[the]]~~ a difference between a predetermined reference current and the supplied current to each of said ~~each~~ amplifying ~~element~~ elements, and each of said remaining bias control circuits on a ~~[[the]]~~ rear side ~~[[has]]~~ includes a current adding circuit ~~for outputting a~~ configured to output an output current having a second value corresponding to the amplitude ~~measured by said measuring circuit~~, and a bias applying circuit ~~for applying~~ configured to apply a second bias corresponding to ~~[[the]]~~ a sum of the output current ~~output~~ from the current adding circuit and ~~[[a]]~~ the predetermined reference current to each of said ~~each~~ amplifying ~~element~~ elements.

Claim 18 (New): A high-frequency amplifying device configured to amplify a high-frequency signal with a plurality of stages of amplifying elements, comprising:

a high-frequency amplifying unit including a plurality of amplifying elements configured to amplify an input high-frequency signal;

a measuring circuit configured to measure an amplitude of the input high-frequency signal; and

a plurality of bias control circuits configured to respectively independently and continuously control biases applied to respective amplifying elements according to a value of amplitude measured by said measuring circuit, wherein

each of the plurality of bias control circuits of a first predetermined number of front stages on a front side and a second predetermined number of back stages on a back side includes a current subtracting circuit configured to input thereto a supplied current having a

first value corresponding to the amplitude and a first bias applying circuit configured to apply the supplied current to the current subtracting circuit and a first bias corresponding to a difference between a predetermined reference current and the supplied current to each of said plurality of amplifying elements, and each of the back stages including a current adding circuit configured to output an output current having a second value corresponding to the amplitude and a second bias applying circuit configured to apply a second bias corresponding to a sum of the output current and the predetermined reference current to each of said plurality of amplifying elements.

Claim 19 (New) The high-frequency amplifying device of Claim 14, wherein the first bias control unit corresponds to a first amplifying element and the second bias control unit corresponds to a second amplifying element, and an output of the first amplifying element is in electrical communication with an input of the second amplifying element.

Claim 20 (New) The high-frequency amplifying device of Claim 14, wherein the plurality of amplifying elements are arranged in series.

Claim 21 (New) The high-frequency amplifying device of Claim 18, wherein an output of one of the first predetermined number of front stages is in electrical communication with an input of one of the second predetermined number of back stages.

Claim 22 (New) The high-frequency amplifying device of Claim 18, wherein the plurality of amplifying elements are arranged in series.

Claim 23 (New) A high-frequency amplifying device for amplifying a high-frequency signal with a plurality of stages of amplifying elements, comprising:

a high-frequency amplifying unit having a plurality of the amplifying elements for amplifying the input high-frequency signal;

a measuring circuit for measuring an amplitude of said input high-frequency signal; and

a bias control circuit for continuously controlling a bias applied to each of said amplifying elements according to a value of said amplitude measured by said measuring circuit, wherein said bias control circuit includes

a current calculating circuit which is at least any one of a current adding circuit and a current subtracting circuit for outputting a current having a value corresponding to the amplitude measured by said measuring circuit,

a bias applying circuit for applying a bias corresponding to the sum of current output from the current adding circuit and a predetermined reference current to the plurality of amplifying elements, and

a detection adjusting circuit for setting a value of a current conducted according to said amplitude of the high-frequency signal when said measuring circuit measures the amplitude thereof.

Claim 24 (New) The high frequency amplifying device according to Claim 23, wherein said current calculating circuit has a current mirror circuit for allowing a current having a value corresponding to the measured amplitude to conduct into one end thereof, and outputting another current from the other end thereof.

Claim 25 (New) The high-frequency amplifying device according to Claim 23, wherein said bias applying circuit has an internal amplifying element for conducting the

current output from the current calculating circuit and the predetermined reference current, and said internal amplifying element and the plurality of amplifying elements of said high-frequency amplifying unit constitute a current mirror circuit.

Claim 26 (New) The high-frequency amplifying device according to Claim 23, wherein said measuring circuit is connected in parallel with said high-frequency amplifying unit.

Claim 27 (New) The high-frequency amplifying device according to Claim 23, wherein said measuring circuit, said current adding circuit and said detection adjusting circuit are connected in parallel with said high-frequency amplifying unit.

Claim 28 (New) The high-frequency amplifying device according to Claim 23, wherein said measuring circuit has a detector circuit connected in series with said high-frequency amplifying unit, for passing the high-frequency signal to said high-frequency amplifying unit and detecting the high-frequency signal.

Claim 29 (New) The high-frequency amplifying device according to Claim 23, wherein said bias control circuit is pluralized.

Claim 30 (New) The high-frequency amplifying device according to Claim 29, wherein each of said bias control circuit has the bias applying circuit, and a predetermined number of stages on the front side of said plurality of bias control circuits has a current subtracting circuit as the current calculating circuit and each of said remaining bias control circuits on the rear side has a current adding circuit as the current calculating circuit.